

**“The Role of Deterrence in the current Nuclear Posture”**  
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**AFGSC Global Strike Challenge**  
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This is great to be back in Louisiana. I do have to apologize; I brought some of the Omaha weather with me.

I'd like to say first of all, a deeply sincere thank you to Secretary of the Air Force James for coming out and being part of this with us and seeing the energy and the enthusiasm and professionalism of our Air Force Global Strike Command. Thank you.

Also to Chief Master Sergeant of the Air Force Cody for coming out. We've got General Chain is out here. We have Admiral Connor. We have Ms. Creedon from the National Nuclear Security Agency. And I'd like to thank all of the volunteers that have put this together, worked on this and all the other activities that go on here and all the volunteers that work the various competitive events that all of you participate in. So let's give them a big round of applause.

It's really great to see the diversity of this audience, particularly all of our younger airmen that are out here today. You are deeply invested in this mission. It's evident in the hard work that all of you have put forth. It's evident in the enthusiasm you have here. We'd also like to thank all of our civic supporters for everything that they do out there in the communities and that they do in the arena that's inside the Beltway.

There are some industry folks here. We'd like to thank them. We don't go buy off-the-shelf nuclear systems. We have to work closely because of the high standards, the severity of the environment. So we work closely with the team in industry to pull all this together and field these systems, sustain these systems and keep an eye on them. So let's give a thanks to the industry --

It's been an interesting journey for our nuclear force over the past couple of years. We thought we have a promising refocus on the nuclear mission set right around 2008. We got some momentum, we got some things going, we got ourselves organized, but in the space of about four years attention drifted. A lot of people wanted to check the square, a lot of people thought we were done, and then we sort of got hit by some things going on inside the Beltway, frankly.

By the time you get toward the end of 2012 we're dealing with what can only be termed budget uncertainty. Go into 1 October without a budget. Then we find out five months later that the thing that was supposed to make a budget happen, in fact backfired, and we were stuck with the Budget Control Act. That kind of fiscal pressure has a corrosive effect on an institution. It happened too quickly for the nuclear enterprise and all of the good progress all of a sudden came to a halt and we started to go backwards a little bit. Particularly the Air Force, but the Navy was also affected by some of this.

But in every problem there's an opportunity. The opportunity came with Secretary [Freedan] who did an internal review for the Secretary of Defense. We had General Welsh who did an external review. We had Strategic Command do our own review. And what we got out of all those reviews was a refocusing at the highest levels of the department on you and what you do and what the people that support you at the Materiel Command and all the other places, the personnel centers, et cetera, do to make this mission [inaudible], and it highlighted all the work that remained to be done.

It also reminded us that there is not a quick fix to 20 years of neglect. Like all of the toughest problems that our Air Force faces, to get success here requires an institutional commitment to stay the course. This is the right thing to do for our airmen and their families. More importantly, it's the right thing to do for our nation because deterrence still matters.

I'd like to talk to you about two things today. The first is to give sort of a Strategic Command perspective on why deterrence matters. Second, to link that mission to the theme of this symposium, "Empowerment – Bridge to the Future" [Inaudible] Innovation.

It was signed by the President. Strategic Command's mission is to deter an attack on the United States and if deterrence fails to defeat our adversaries. Specifically, Strategic Command has responsibilities for nuclear operations, space operations, and cyber operations.

It's important to note that strategic attack is not limited to nuclear weapons. It can be any attack that does great damage to our interests or objectives.

Now in the Cold War, the strategic threat was posed by Soviet bombers and missiles. They were the only weapons able to overcome the obstacles of time and distance to directly strike our homeland. That unique characteristic is no longer limited to bombers and missiles. Today a modern strategic attack can also occur through space or cyberspace. That further diminishes that protective value of time and distance.

However, nuclear weapons remain unique. They remain unique in their real power. They remain unique in their imagined power. Only nuclear weapons can inflict existential destruction. But that power that can inflict destruction is also the power that serves to restrain the behavior of major states.

We have gone more than 70 years without a great power war. That is the longest period without war between major powers since the rise of the nation state. A period that historian John Gaddis called "The Long Peace".

That long peace can be credited in part to the fear created by nuclear weapons. It's credited to the objective of using those weapons to maintain strategic stability. Strategic stability between major powers remains the central objective of our deterrence strategy today.

Now as much as we might all hope for a different world for the new century, the truth is the 21<sup>st</sup> Century was a lot like the last half of the 20<sup>th</sup> Century, only worse. It is clearly not a world of

increasing security stability where major powers march arm in arm on a path to a world free of nuclear weapons. We live in a world where the nuclear weapons of other states continue to pose an existential threat. A world where nuclear weapons can still be used to coerce or blackmail other states. A world that is, as Admiral Haney testified earlier this year, more complex, dynamic and uncertain than at any time in recent history.

That's a pretty good description of the unease most senior leaders feel today. I'm not going to rehash in detail the events of the last year, but we've all seen the drumbeat of headlines that can almost numb us into inaction. North Korea, threatening to us nuclear weapons. Syria, using chemical weapons. China throwing sharp elbows as it lays claim to large tracts of territory in the South China Sea. Putin's Russia, violating treaties and borders. And the so-called Islamic State, giving vicious video testimony to the horror humans can inflict on each other.

There is no shortage of bad actors on the world stage. Our country cannot ignore our global responsibilities nor can we uninvent nuclear weapons. The goal of strategic stability means we must continue to deter adversaries and assure allies.

To do so requires a 21<sup>st</sup> Century force structure so that no adversary is tempted to consider a first strike. A course with the size and composition to hedge against the risks of technical failure, technological disruption, or geopolitical surprise. A force relying on the robust and agile intelligence to provide indications of warning. A force with a dedicated network of space and ground systems to provide critical early warning for missile and bomber threats. And a force linked to control by national and nuclear command and control structures. Supported by a modern laboratory infrastructure to sustain our nuclear weapons.

Our nation has given a small cadre of warriors the special trust and responsibility of nuclear weapons. We recognize that this is work that must be done. It must be done every day. And it must be done exceptionally well. But we're not starting from scratch. There are hard-learned lessons that resonate across the force since the days of B-36 bombers, Atlas ICBMs, and Polaris missiles. Lessons in common threats have found their way into the culture of our nuclear forces. Excellence, discipline, strict adherence to guidance and critical self-assessment. Those behaviors continue to be emphasized in the force today. But one theme central to the success of this force throughout the [inaudible] was lost in the decades after the fall of the Berlin Wall, and that is innovation.

Some doubt that innovation can exist in a culture that requires strict procedural discipline. I think they're wrong. Innovation is in the heritage of our Air Force and particularly in the blood line of Air Force Global Strike Command.

That blood line goes to Strategic Air Command and that command had a culture of tough self-assessment and best practices. It was a culture grounded in analysis, empowerment and innovation. General LeMay was arguably the most innovative commander the Air Force has ever had. From World War II to the standup of Strategic Air Command to his time as Chief of Staff of the Air Force, he was never afraid to challenge the conventional wisdom. He worked hard for his mission.

He worked harder for his people. He got better housing for the families at the Strategic Command bases. He got junior airmen out of open bay barracks and into two-man dormitory rooms. He was an innovative commander. He rapidly developed bomber aircraft and weapons. Changed policy to improve readiness and security. He built [inaudible] facilities and communication networks. And he pushed industry for an air refueling system to transfer fuel at a higher rate than had ever been possible before, creating our modern tanker.

Another Air Force leader from those days was General Schriever. General Schriever's success in birthing our ICBM and space programs was not without risk and included many failures. But he accepted the risk because he understood the big picture, that without an ICBM's rapid response of long range capability, Soviet advances would create instability in the strategic balance. But with the ICBM we could, in his own words, avoid total war.

He also had the legacy of [innovating] the leaders that shaped the nuclear force. One was Rear Admiral Red Redburn who did what many considered to be impossible. He turned a submarine into a mobile missile launch platform in less than five years. In that short timeframe he simultaneously solved the problems of suitable navigation, of a safe launching system, of the need for smaller warheads, and the risky development of solid fuel missiles. On July 20, 1960, the first Polaris missile was launched from a submarine, the USS George Washington.

I use these leaders as examples to show you that innovation is in your DNA. Secretary James and General Wilson have energized the Air Force on a path towards resourcing big innovation. The long-delayed recapitalization of our force, the replacement of our aging Huey helicopters, the Ground-Based Strategic Deterrent to replace our Minuteman III, the Long Range Standoff Missile to replace our [inaudible], and the Long Range Strike Bomber.

But a credible force also needs small [innovation]. Innovation at the tactical level. That innovation gets quick results. It nurtures a culture where innovators thrive. This operational innovation is how do we get faster? How do we get cheaper? How do we get better? At each functional job in every unit. How do we get to the point where we're all asking those kinds of questions? And when we think we know an answer, how do we get people to listen?

It doesn't matter what your job is. Whether your particular operation is missile maintenance, whether it's security, whether it's flying, civil engineers, services, health care, personnel. The work on the USS George Washington was not done when that Polaris missile launched. The tough, the tough innovative work remained. What are the mission tactics, techniques and procedures? How do we prepare the boat between missions? How do we maintain the boat at sea for long periods? How do we manage the force? How do we train, inspect and assess the crews? That was the hard part. That wasn't resolved in a book on anybody's shelf. That results in a credible nuclear force.

We've been doing bomber and ICBM operations since the 1960s. We are never going to get it perfect. I suspect that tonight's scores will demonstrate that. If everybody gets a perfect score, I will eat this [inaudible].

But the reason we're never perfect is because in addition to being human we are constantly dealing with change. In fact the only constant in our business is change. Adversaries change, the technologies change, the budgets change, the people change, the organization structure changes, and the only way to survive constant change is constant innovation.

The theme of this symposium is Empowerment. I doubt General LeMay would have ever used the word empowered. He'd probably put a boot up somebody's butt if they used it in front of him. But I tell you, he knew what it meant. In his memoir he wrote about a German officer who wondered how the Americans ever got anything done since their troops obviously had no discipline. The German general thought that whenever the Americans gave an order that they then had to explain why. And in LeMay's words, he said, "My notion has been that you explain why and then you don't need to give any order at all. All you have to do is get your big feet out of the way and things will happen. Get the team together and say there's the goal, people, go ahead."

Empowerment for innovation is not a choice. It's a necessity. We can't innovate from the top. Senior leaders are not directing the flight line or the missile field or the launch control center. They're not running the dining facilities, seeing patients at the clinic, issuing CAT cards at the MPF or doing training. To make bottom-up operational innovations succeed senior leaders can set a structure that encourages fresh ideas, and then they have to listen.

Admiral Haney and I have been impressed by the structure you've set with the Force Improvement Program and its ability to draw out innovation. The measure that matters is results. Some of those include revamped personnel reliability program processes; improved security force tactics, techniques and procedures; changes to the evaluation and inspection process; the redirecting of more than \$500 million towards facility sustainment, bomber and missile operations support, launch control center refurbishment, and updated security forces.

But more importantly, you've got leaders who listen, and right now I'd like to offer a round of applause to Secretary James, General Wilson, and the airmen who worked through the Force Improvement Program.

Now the [party] speech can [go out the window].

In conclusion, thanks for what you do every day. It is noble work and it is well done. I'm excited that this symposium and the Global Strike Challenge are back. The competition over the decades has raised your game and this competition gives each of you through our part of the teams the opportunity to raise the bar when you go back to your squadrons, to take the lessons learned from all of the pieces and parts of this that you participated in, all of the skills that you've honed, all of the challenges that you've had to face. Turn that into a lesson.

That lesson that you go back to your unit with is part of that cycle of operational innovation. It is how we stay agile, flexible and the best.

I know as the rest of the world knows you are a force to be reckoned with. Thank you all for choosing to serve your nation and for doing it so well.

Please pass our thanks on also to your families. We appreciate their sacrifices. And as General LeMay said, there's the goal people. Go ahead.

What I'd like to do now is see if anybody has any questions.

Let me talk about one thing, because one of the things that has been important to Admiral Haney as he has gone out and engaged with various think tanks, with media organizations, is to continue to talk about not only the need to modernize deterrence, because it is ancient and a recapitalization is 15 years overdue, but also because of what's going on in the rest of the world. Because of developments of the Russians. Because of developments of the Chinese. And we're often limited by having to talk only about what's been able to leak out in the press. But one thing that leaked out in the press recently was now the North Koreans are coming up with their own SSB force. It looks like mid-'50s Russian technology. But it doesn't mean it's not a threat.

So we continue to pay attention to those developments. While on the one hand we have constant pressure on us about this mission, on the other hand the rest of the world is continuing to march out, to modernize, to develop. And the concern that Admiral Haney has and that I share is that something could happen out there that could alter this balance, and it's very concerning where the Russians are right now with their violations of the intermediate nuclear force treaties, a lot of the developments there we're seeing. And one of the things that concerns us, and I touched on it briefly in the speech, is this idea of strategic attack. About the ability to come after the United States from space and cyberspace, and about how those work together and how in a crisis and in what we've seen in some of the wargames that we've done, the escalation of wargames, is we've seen a synergy between nuclear, space and cyber. Where an adversary may end up inadvertently crossing a red line because they execute a cyber attack that in turn degrades nuclear command and control, or degrades their ability to do missile warning from space.

So there are a lot of things that need to be taken care of out there in terms of making sure that this entire system from the missile warning architecture to the nuclear command and control to what we recognize as the traditional triad stays linked up, stays together. Because that's where the credibility of the weapon system is, is in the ability to pull it all together. And most importantly, the ability of all of you to be highly trained and be able to demonstrate your skills every day.